

Listing of the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1 - 9. (Cancelled)

10. (Currently amended) A pharmaceutical preparation comprising an antibody to a bacterial Cu,Zn-SOD of the dimeric type, ~~or a fragment, derivative or variant of the Cu,Zn SOD, wherein antibodies raised against said fragment, derivative or variant also bind intact full length Cu,Zn SOD;~~ and a pharmaceutically acceptable carrier.

11. (Original) A pharmaceutical preparation according to Claim 10, wherein said antibody provides protective immunity to meningococcal disease.

12. (Original) A pharmaceutical preparation according to Claim 10, wherein said composition provides protective immunity to *Actinobacillus pleuropneumoniae* infection.

13. (Previously presented) A pharmaceutical preparation according to Claim 10, wherein said composition provides protective immunity to infection from a gram negative bacterial species selected from the group consisting of *Pasteurellaceae*; *Neisseria*; *Haemophilus*; *Salmonella*; and *Escherichia*.

14. (Previously presented) A pharmaceutical preparation according to Claim 10, wherein said antibody displays bactericidal activity.

15. (Currently amended) A multivalent vaccine comprising a plurality of Cu,Zn-SODs of the dimeric type, ~~or fragments, derivatives or variants thereof, wherein antibodies raised against said fragments, derivatives or variants also bind full length Cu,Zn-SOD, and~~ wherein said plurality of Cu,Zn-SODs are from the same or different species of Gram negative bacteria.

16. (Currently amended) A multivalent vaccine comprising a bacterial Cu,Zn-SOD of the dimeric type, ~~or fragments, derivatives or variants wherein antibodies raised against said fragments, derivatives or variants also bind full length Cu,Zn-SOD, and a~~ second protein that is not a Cu,Zn-SOD.

17. (Previously presented) A multivalent vaccine according to Claim 15, wherein said vaccine provides protective immunity to meningococcal disease.

18. (Currently amended) A method of treating an individual with a bacterial infection comprising administering a composition comprising a bacterial Cu,Zn-superoxide dismutase of the dimeric type, ~~or a fragment, derivative or variant of the Cu,Zn-SOD, wherein antibodies raised against said fragment, variant or derivative also bind intact full length Cu,Zn-SOD.~~

19. (Previously presented) A method according to Claim 18, wherein the bacterial infection is due to Gram negative species of bacteria.

20. (Previously presented) A method according to Claim 18, wherein the bacterial infection is due to meningococcal infection.

21 - 27. (Cancelled)

28. (Currently amended) A method of treating an individual with a bacterial infection comprising administering a composition comprising an effective amount of an antibody specific to bacterial Cu,Zn-SOD of the dimeric type, ~~or a fragment of said antibody.~~

29. (Previously presented) A method according to Claim 28 wherein the antibody is a monoclonal antibody.

30. (Currently amended) A method of treating an individual with a bacterial infection comprising administering a composition comprising a nucleic acid encoding a bacterial Cu,Zn-superoxide dismutase of the dimeric type, ~~or a fragment, derivative or variant of the Cu,Zn-SOD, wherein antibodies raised against said fragment, variant or derivative also bind intact full length Cu,Zn-SOD .~~

31. (Currently amended) A method of treating or preventing bacterial infection comprising administering an effective amount of a bacterial Cu,Zn-SOD of the dimeric type

~~or a fragment, variant or derivative of the Cu,Zn SOD, wherein antibodies raised against said fragment, variant or derivative also bind intact full length Cu,Zn SOD.~~

32. (Previously presented) A method according to Claim 18, wherein said composition provides protective immunity to *Actinobacillus pleuropneumoniae* infection.

33. (Previously presented) A method according to Claim 19, wherein said gram negative bacterial species are selected from the group consisting of *Pasteurellaceae*; *Neisseria*; *Haemophilus*; *Salmonella*; and *Escherichia*.

34. (Previously presented) A method according to Claim 28, wherein the bacterial infection is a meningococcal infection.

35. (Cancelled)